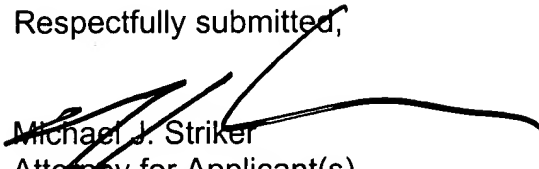


Consideration and allowance of the present application is most respectfully requested.

Respectfully submitted,

  
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## Patent Claims

1. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a substrate (1), this arrangement consisting of two  
5 electrically conductive electrodes (2), which are not electrically connected with one another, and a surface structure with suitable dimensions for the representation of the conductivities of the electrode arrangement and/or of the substance of a sensor-active layer by the  
10 conductance of a measuring probe or of a function element, so characterized that on a dielectric substrate (1) between two electrodes (2) a number of conductive islands (3), which are not or are not essentially connected with one another, are applied as a two-dimensional area arrangement.
- 15 2. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a substrate (1), this arrangement consisting of two electrically conductive electrodes (2), which are not electrically connected with one another, and a surface  
20 structure with suitable dimensions for the representation of the conductivities of the electrode arrangement and/or of the substance of a sensor-active layer by the conductance of a measuring probe or of a function element according to claim 1, so characterized that the structure  
25 of the conductive islands (3) consists of a fine distribution of conductive substances on any insulating substrate (1).
3. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a  
30 substrate (1), this arrangement consisting of two electrically conductive electrodes (2), which are not electrically connected with one another, and a surface
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4. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a substrate (1), this arrangement consisting of two electrically conductive electrodes (2), which are not electrically connected with one another, and a surface structure with suitable dimensions for the representation of the conductivities of the electrode arrangement and/or of the substance of a sensor-active layer by the conductance of a measuring probe or of a function element according to claims 1 [to 3] so characterized that the conductive islands (3) are arranged within special geometric figures.

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6. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a substrate (1), this arrangement consisting of two electrically conductive electrodes (2), which are not electrically connected with one another, and a surface structure with suitable dimensions for the representation of the conductivities of the electrode arrangement and/or of the substance of a sensor-active layer by the conductance of a measuring probe or of a function element according to claims [1] 1 [to 5], so characterized that a carrier for the sensor with a sufficiently thin substrate (1) has a sensor-active layer on all sides.

7. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a substrate (1), this arrangement consisting of two electrically conductive electrodes (2), which are not electrically connected with one another, and a surface structure with suitable dimensions for the representation of the conductivities of the electrode arrangement and/or of the substance of a sensor-active layer by the conductance of a measuring probe or of a function element according to claims [1] 1 [to 6], so characterized that the conductive islands (3) in their short-range order show hyperstructures with anisometries of the substances with respect to the substrate.

8. An electrode arrangement for an electrical component and carrier for sensors, which arrangement is applied on a substrate (1), this arrangement consisting of two electrically conductive electrodes (2), which are not electrically connected with one another, and a surface structure with suitable dimensions for the representation of the conductivities of the electrode arrangement and/or

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